

WHAT IS CLAIMED IS:

1. A laser emitter comprising:

a first lens barrel portion for holding a first laser element;

5 a second lens barrel portion, of which an optical axis is slanted with respect to an optical axis of the first lens barrel portion, for holding a second laser element, the second lens barrel portion being provided as one unit with the first lens barrel  
10 portion;

a first lens supporting portion provided at a tip of the first lens barrel portion to support a first collimator lens; and

a second lens supporting portion provided at a  
15 tip of the second lens barrel portion to support a second collimator lens,

wherein the first and second lens supporting portions can support the collimator lenses with adjustment ranges stretching in optical axial  
20 directions, respectively, and the first and second collimator lenses are fixed and supported at positions adjusted within the adjustment ranges, respectively.

25 2. A laser emitter according to claim 1, wherein the first and second collimator lenses are bonded to the first and second lens supporting

portions, respectively.

3. A laser emitter according to claim 1,  
wherein the first and second lens supporting portions  
5 partially support circumferential surfaces of the  
collimator lenses.

4. A laser emitter according to claim 3,  
wherein the first and second lens supporting portions  
10 have plural projections that are projected from the  
tips of the lens barrel portions.

5. A laser emitter according to claim 4,  
wherein the plural projections partially support the  
15 circumferential surfaces of the collimator lenses.

6. A laser emitter according to claim 1,  
wherein the first and second laser elements are fixed  
to a common electric substrate and are fixed by press  
20 fit to the first and second lens supporting portions.

7. A laser emitter according to claim 1,  
wherein the first and second lens supporting portions  
have at their tips diaphragm portions for shaping a  
25 shape of laser light.

8. A laser emitter according to claim 1,

wherein optical axes of first and second laser beams emitted from the laser emitter are slanted with respect to each other to bring the first and second laser beams close to each other.

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9. A laser scanning device comprising:

a laser unit for emitting first and second laser beams, the laser unit having: a first lens barrel portion for holding a first laser element that emits  
10 the first laser beam; a second lens barrel portion for holding a second laser element that emits the second laser beam of which an optical axis is slanted with respect to an optical axis of the first laser beam; a first lens supporting portion provided at a  
15 tip of the first lens barrel portion to support a first collimator lens; and a second lens supporting portion provided at a tip of the second lens barrel portion to support a second collimator lens, wherein the first and second lens supporting portions can  
20 support the collimator lenses with adjustment ranges stretching in optical axial directions, respectively, and the first and second collimator lenses are fixed and supported at positions adjusted within the adjustment ranges, respectively; and  
25 a rotary mirror for running the first and second laser beams, which are brought close to each other by exiting the laser unit, together.

10. A laser scanning device according to claim 9, wherein the first and second collimator lenses are bonded to the first and second lens supporting portions, respectively.

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11. A laser scanning device according to claim 9, wherein the first and second lens supporting portions partially support circumferential surfaces of the collimator lenses.

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12. A laser scanning device according to claim 11, wherein the first and second lens supporting portions have plural projections that are projected from the tips of the lens barrel portions.

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13. A laser scanning device according to claim 12, wherein the plural projections partially support the circumferential surfaces of the collimator lenses.

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14. A laser scanning device according to claim 9, wherein the first and second laser elements are fixed to a common electric substrate and are fixed by press fit to the first and second lens supporting portions.

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15. A laser scanning device according to claim 9, wherein the first and second lens supporting

portions have at their tips diaphragm portions for shaping a shape of laser light.

16. A laser scanning device according to claim  
5 9,

wherein the laser unit has a holder portion that is unified with the first and second lens barrel portions, and

10 wherein the holder portion is provided with a synchronization detecting portion for detecting synchronous timing of laser beams and a slit for restricting a light flux that is incident on the synchronization detecting portion.

15 17. A laser scanning device according to claim 9, wherein the laser scanning device is used in an electrophotographic apparatus to expose a charged photosensitive member to light for forming an image.